

What is Claimed Is:

1. A method for determining an overall level of confidence for a medical clinical conclusion comprising the steps of:
 - a. determining at least one medical element from a set of medical data, wherein each medical element is associated with an impact parameter for the medical clinical conclusion;
 - b. for each medical element, generating a confidence parameter as a function of the medical clinical conclusion; and,
 - c. determining an overall level of confidence parameter as a function of each of the confidence parameters and the associated impact values.
2. The method according to claim 1, wherein step (a) further includes the step of parsing the set of medical data to match at least one phrase with a previously stored essential element.
3. The method according to claim 1, wherein the confidence parameter is determined as a function of a measurement value.
4. The method according to claim 3, wherein the function is a fuzzy logic membership function.
5. The method according to claim 1, wherein step (c) further includes the step of generating a linear combination of second functions, wherein the second functions take a confidence parameter and impact value as arguments.
6. The method according to claim 5, wherein the second functions generate a product of a confidence parameter and an impact parameter.
7. A system for determining an overall level of confidence for a medical clinical conclusion comprising a processor, wherein the processor is adapted to:
 - a. determine at least one medical element from a set of medical data, wherein each medical element is associated with an impact parameter for the medical clinical conclusion;

- b. for each medical element, generate a confidence parameter as a function of the medical clinical conclusion; and,
 - c. determine an overall level of confidence parameter as a function of each of the confidence parameters and the associated impact values.
- 8. A method for determining an overall level of confidence for medical clinical conclusion comprising the steps of:
 - a. storing a plurality of possible clinical conclusions;
 - b. storing a plurality of medical essential elements;
 - c. for each clinical conclusion, storing a plurality of membership functions, wherein each membership function associates an essential element with a clinical conclusion;
 - d. storing a plurality of impact parameters, wherein each impact parameter associates a weight of an essential element pointing toward a clinical conclusion;
 - e. determining at least one relevant medical essential element; and,
 - f. generating an overall confidence parameter for the medical clinical conclusion as a function the at least one relevant medical essential element, the associated membership functions and the impact parameters.
- 9. A method for determining an overall level of confidence for a medical clinical conclusion comprising the steps of:
 - a. storing at least one membership function, wherein each membership function relates a medical element with a membership confidence value for a clinical conclusion;
 - b. storing a criterion impact parameter for each membership function, wherein each criterion impact parameter represents an importance of a medical element with respect to a clinical conclusion; and,
 - c. determining an overall confidence value for the clinical conclusion, wherein the overall confidence value is determined as a function of at least one membership function and at least one criterion impact parameter.

10. A method for evaluating a medical clinical conclusion comprising the steps of:

- (a) storing at least one medical essential element;
- (b) storing at least one medical rule, wherein each medical rule associates a medical essential element with a clinical conclusion and at least one of a membership confidence function and an impact parameter;
- (c) receiving at least one medical claim item, wherein each medical claim item is associated with a medical essential element and a date parameter;
- (d) sequencing the at least one medical claim item as a function of the associated date parameter;
- (e) segmenting the at least one medical claim item into at least one chronological segment, wherein each chronological segment includes at least one medical claim item and is associated with a clinical significance; and,
- (f) for each chronological segment determining a total membership confidence value with respect to the clinical conclusion based upon the at least one medical rule.

11. A method for evaluating a medical clinical conclusion comprising the steps of:

- (a) storing at least one medical essential element;
- (b) storing at least one medical rule, wherein each medical rule associates a medical essential element with a clinical conclusion and at least one of a membership confidence function and an importance parameter;
- (c) parsing at least one medical record, which includes a plurality of phrases, to generate at least one medical claim item, wherein each medical claim item is associated with a medical essential element and a date parameter;
- (d) sequencing the at least one medical claim item as a function of the associated date parameter;
- (e) segmenting the at least one medical claim item into at least one chronological segment, wherein each chronological segment includes at least one medical claim item and is associated with a clinical significance; and,
- (f) for each chronological segment determining a total membership confidence value with respect to the clinical conclusion as a function of at least one medical rule.

12. The method according to claim 11, wherein step (c) further includes the steps of:

- (i) storing at least one phrase element, wherein each phrase element is associated with a medical essential element; and,

(ii) for each of the plurality of phrases in the medical record, locating a matching phrase element.

13. The method according to claim 12, wherein step (e) further includes the steps of:

(i) storing a at least one chronological rule, wherein each chronological rule associates an essential element with a change in a clinical segment; and

(ii) evaluating the medical essential element associated with each medical claim item using a chronological rule to determine at least one segment point.

14. The method according to claim 12, wherein step (f) further includes the steps of:

(i) based upon the at least one medical rule calculating a sum of membership functions multiplied by an impact parameter with respect to the medical clinical conclusion for each medical item; and,

(ii) dividing said sum by a sum of an importance parameter associated with each medical item.

15. A system for evaluating a medical clinical conclusion, comprising:

a database for storing medical essential elements;

a database for storing at least one medical rule, wherein each medical rule associates a medical essential element with a clinical conclusion and at least one of a membership confidence parameter and an importance parameter;

means for receiving at least one medical record, wherein each medical record includes a plurality of phrases;

a processor, wherein the processor is adapted to:

(a) parse the at least one medical record to generate at least one medical claim item, wherein each medical claim item is associated with a medical essential element and a date parameter;

(b) sequence the at least one medical claim item as a function of the associated date parameter;

(c) segment the at least one medical claim item into at least one chronological segment, wherein each chronological segment includes at least one medical claim item and is associated with a clinical significance; and,

(d) calculate a total membership confidence value with respect to a clinical conclusion as a function of at least one medical rule.

16. A method for determining an overall level of confidence for a conclusion comprising the steps of:
- a. determining at least one element from a set of data, wherein each element is associated with an impact parameter for the conclusion;
 - b. for each element, generating a confidence parameter as a function of the conclusion; and,
 - c. determining an overall level of confidence parameter as a function of each of the confidence parameters and the associated impact values.